

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Previously presented): A microfluid-system supporting unit, comprising a first supporting plate and at least one hollow filament constituting the channel of the microfluid system, wherein the hollow filament is placed on the first supporting plate in any shape, an internal region of the hollow filament has a particular region being given a function and an end part of at least one hollow filament is outside an outer edge of the first supporting plate,

wherein the function is selected from the group consisting of adsorption-desorption, ion exchange, separation, removal, partition, and oxidation-reduction.

2. (Original): The microfluid-system supporting unit according to Claim 1, wherein more than one hollow filament are placed.

3. (Previously presented): The microfluid-system supporting unit according to Claim 1, further comprising at least one hollow filament in any shape having no function in the hollow filament placed on the first supporting plate.

4. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein at least one hollow filament is placed crosswise to at least another hollow filament.

5. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein at least one hollow filament is placed crosswise to the hollow filament itself.

6. (Previously presented): The microfluid-system supporting unit according to Claim 1, further comprising a second supporting plate, wherein at least one hollow filament is held between the first and second supporting plates.

7. (Previously presented): The microfluid-system supporting unit according to Claim 6, wherein part of at least one hollow filament is outside an outer edge of the second supporting plate.

8. (Previously presented): The microfluid-system supporting unit according to Claim 6, wherein at least one hollow filament has a port for at least one of receiving a fluid from outside and discharging it to outside.

9. (Original): The microfluid-system supporting unit according to Claim 8, wherein the port is fixed to at least one of the first and second supporting plates.

10. (Previously presented): The microfluid-system supporting unit according to Claim 1, further comprising a relay unit for connecting the hollow filaments to each other.

11. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein a metal layer is formed on a particular region of at least one hollow filament.

12. (Previously presented): The microfluid-system supporting unit according to Claim 1, further comprising a particular region of at least one hollow filament has a light-transmitting property.

13. Cancelled.

14. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein the function is provided by fixing a filler in a particular internal region of at least one hollow filament.

15. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein the function is provided by graft polymerization on a particular internal region of at least one hollow filament.

16. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein the function is provided by forming a porous material in a particular internal region of at least one hollow filament.

17. (Previously presented): The microfluid-system supporting unit according to Claim 1, wherein at least one hollow filament has a port for at least one of receiving a fluid from outside and one discharging it to outside.

18. (Withdrawn-Previously presented): A microfluid-system supporting unit, comprising a first supporting plate and at least one hollow filament constituting the channel of the microfluid system, wherein the hollow filament is placed on the first supporting plate in any shape, an internal region of the hollow filament has a particular region being given a function and the at least one hollow filament functions as a connection terminal.

19. (Withdrawn-Previously presented): A microfluid-system supporting unit, comprising a first supporting plate and at least one hollow filament constituting the channel of the microfluid system, wherein the hollow filament is placed on the first supporting plate in any shape, an internal region of the hollow filament has a particular region being given a function and a wall of the at least one hollow filament is nonporous.

20. (Previously presented): The microfluid-system supporting unit according to Claim 2, wherein the more than one hollow filaments are placed crosswise on the same plane.

21. (Previously presented): The microfluid-system supporting unit according to Claim 2, comprising a first filament bundle of multiple hollow filaments and a second filament bundle of multiple hollow filaments, wherein the multiple hollow filaments of said first filament bundle are placed crosswise on the same plane to the multiple hollow filaments of said second filament bundle.

22. (Previously Presented): The microfluid-system supporting unit according to Claim 1, wherein the first supporting plate comprises an exposure window that is formed through the first supporting plate and a first adhesive layer,

wherein the first adhesive layer is present between the first supporting plate and the at least one hollow filament.

23. (Previously Presented): The microfluid-system supporting unit according to Claim 22, wherein the exposure window is formed through the first supporting plate, the first adhesive layer, a second supporting plate and a second adhesive layer

wherein the second supporting plate is formed on the opposite side of the at least one hollow filament from the first supporting plate; and

the first adhesive layer is present between the first supporting plate and the at least one hollow filament and the second adhesive layer is present between the second supporting plate and the at least one hollow filament.

24. (Previously Presented): The microfluid-system supporting unit according to Claim 6, wherein an exposure window is formed through the second supporting plate and a second adhesion layer;

wherein the second adhesive layer is present between the second supporting plate and the at least one hollow filament.

25. (Previously Presented): A microfluid-system supporting unit, comprising
a first supporting plate,
a first adhesive layer,
at least one hollow filament constituting the channel of the microfluid system,
a second adhesive layer,
a second supporting plate,
wherein:

the at least one hollow filament is held between the first and second supporting plates in any shape;

the first adhesive layer is present between the first supporting plate and the at least one hollow filament and the second adhesive layer is present between the second supporting plate and the at least one hollow filament;

an internal region of the hollow filament has a particular region being given a function, wherein the function is selected from the group consisting of adsorption-desorption, ion exchange, separation, removal, partition, and oxidation-reduction; and

an exposure window is formed through the second supporting plate, said second adhesive layer and said first adhesive layer, but not the first supporting plate, and the exposure window is formed at an outer edge of the first supporting plate.

26. (New): The microfluid-system supporting unit according to Claim 1, wherein the first supporting plate comprises an exposure window that is formed through the first supporting plate.